CAPITAL FACILITIES

1. Introduction

The Growth Management Act (GMA) requires that communities plan for capital facilities to ensure there is an adequate level of facilities and services in place to support development at time of occupancy or use.

The overall goal is to ensure that new development does not exceed a jurisdiction's ability to pay for needed facilities or that new development does not decrease current service levels below locally established minimum standards.

Pursuant to this goal, the Capital Facilities Element is a long range financial plan that allows the City to prioritize public projects and identify adequate funding sources. This Capital Facilities Element serves as a guide to the City's financial commitment in providing those facilities desired by the community.

The Capital Facilities Element is linked to the City's annual Capital Improvement Plan (CIP), which identifies current and future capital projects as well as anticipated funding sources. Although the Transportation Improvement Plan (TIP) is technically part of the CIP, GMA requires that transportation be addressed through the Transportation Element, which includes the TIP. Only a subset of the projects listed in the Capital Facilities Element and Capital Improvement Plan receive funding and are approved in the City's annual budget process.

2. Growth Management Act Requirements

As required by the Growth Management Act, this element includes:

2.1 An inventory of existing capital facilities owned by the City, showing the locations and capacities of the facilities;

2.2 A forecast of the future needs for the capital facilities;

2.3 The proposed location and capacities of expanded or new capital facilities;

2.4 A six-year plan to finance such capital facilities within projected funding capacities and clearly identified sources of public money for such purposes;

2.5 Policies to reassess the Land Use Element if probable funding falls short of meeting existing needs and to ensure that the Land Use Element, Capital Facilities Element and financing plan within the Capital Facilities Element are coordinated and consistent.

3. Capital Facilities

For the purposes of this plan, Issaquah defines a capital facility as a structure or equipment, which generally costs $5,000 or more and has a useful life of five years or more. Minor projects activities or maintenance costing less than $5,000 are considered minor maintenance and are not part of capital improvements.

Under GMA, the Capital Facilities Element is required to address all public facilities except transportation facilities, which are addressed separately in the Transportation Element.

3.1 Level of Service Standards. Levels of service (LOS) are quantifiable measures of the amount of public facilities that are provided to the community. Levels of service may also measure the quality of some public facilities. Typically, measures of levels of service are expressed as ratios of capacity to demand.

Each facility's level of service is measured using a standard specific to that facility type to determine the level of service needs. For example, police level of service standards rely on an annual average call for service standard to determine the community's current and future police needs. Table CF-1 lists examples of levels of service for the range of capital facilities within the City.

A city uses a defined level of service standard to determine the community's future facility needs to plan for both the provision and funding of future capital facilities. The GMA stipulates that a community has the ability to provide needed facilities within six fiscal years of any development. To determine how the requirement will be met, two questions need to be answered:

a. What is the quantity of public facilities that will be required by the end of the sixth year?
b. Is it financially feasible to provide the quantity of facilities that are required by the end of the sixth year?

The answer to each question is derived by evaluating the level of service for each type of facility based on the adopted standard. The need in the sixth year is calculated and the end result is either a deficiency or surplus of the measured capital facility.

Existing Level of Service: The existing LOS represents the minimum standards, which the City requires for permit approval for the provision of water, sanitary sewer or storm drainage utility service.

Level of Service Goals: The LOS goals are standards which the City generally meets under existing conditions, but may not meet at certain times or in certain areas. These levels of service also generally indicate needed capital facilities improvements in order to achieve the LOS goal.

Table CF-1A

Type of Capital Facility	Lead Agency	Examples
Water	City of Issaquah Public Works Dept.	Provide adequate storage and fire flow
Sanitary Sewer	City of Issaquah Public Works Dept.	Capacity adequate to handle the demand from each service connection
Surface Water Drainage	City of Issaquah Public Works Dept.	All public on-site or off-site storage, conveyance and treatment facilities shall result in little or no impact to downstream water quality and quantity
Fire	Eastside Fire and Rescue	Response time within a defined geographic area
Police	City of Issaquah Police Department	Calls for service
Parks	City of Issaquah Parks Department	Expenditure per capita
Roads and Streets	City of Issaquah Public Works Dept.	Traffic volume to planned capacity
Municipal Facilities (Administration and Maintenance)	City of Issaquah Operations and Maintenance	Square footage per capita or user

Examples of Level of Service Measurements
Table CF-1B
City of Issaquah's Level of Services

Type of Capital Facility	Lead Agency	Level of Service Standards
Water	City of Issaquah Public Works Dept.	Normal Operating: ➢ 40 pounds per square inch (psi) at the top floor of a building1. ➢ Maximum of 150 psi in water mains. Fire / Emergency Demand: ➢ 3,500 gallons per minute (gpm) for non residential uses. ➢ 1,000 gpm for residential uses with side yard setbacks equal to or greater than eight feet. ➢ 1,500 gpm for residential uses with side yard setbacks less than eight feet. Supply: ➢ Provide as needed to meet total demand2
Sanitary Sewer	City of Issaquah Public Works Dept.	Sewer System Design3: ➢ Infiltration / Inflow shall not exceed 1,100 gallons per acre per day. ➢ Convey the 5-year flow without overflowing. ➢ Capacity to safely pass the 20-year wastewater flow scenario4 Sewer System Provision: ➢ Provide sewer service to all areas within the sewer service area.
Storm Water Drainage	City of Issaquah Public Works Dept.	Stormwater System Design: ➢ All systems meet 1998 King County Surface Water Design Manual ➢ Maintain all City owned stormwater facilities a minimum of once every two years. Flood Hazard & Warning: ➢ Monitor all critical facilities during significant storms. ➢ Provide flood warning and hazard response when the upstream Issaquah Creek gauge exceeds 6 feet.

1 State law requires a minimum of 30 psi at the meter; the City of Issaquah has adopted a more stringent standard.

2 Current usage is approximately 205 gallons per day (gpd) per equivalent residential unit (ERU).

3 The sewer system is designed to meet 100% of the Department of Ecology's criteria for Sewer Works Design.

4 The amount of sewage generated at the 20-year full site buildout.

Table CF-1B
City of Issaquah's Level of Services (Continued)

Type of Capital Facility	Lead Agency	Level of Service Standards
Fire	Eastside Fire and Rescue	➢ 0.428 fire / aid units per 1,000 people.
Police	City of Issaquah Police Department	➢ Adopted LOS = 1 officer per 640 Calls For Service (CFS) ➢ One police vehicle per two police officers[5] ➢ Three hundred square feet of Public Safety building per police officer[5] • The Level of Service Standards listed above are equivalent to 1.313 police officers per 1,000 people[6]
Parks	City of Issaquah Parks Department	➢ $2036.26 expenditure on park facilities per capita
Transportation	City of Issaquah Public Works Dept.	<u>Road Capacity (See Transportation Element):</u> ➢ Regional Arterial (V/PC): • Peak Direction: 1.00 • Non Peak Direction: 0.85 ➢ Principal Arterial (V/PC): • Peak Direction: 1.00 • Non Peak Direction: 0.85 ➢ Minor Arterial (V/PC): • Peak Direction: 0.85 • Non Peak Direction: 0.65 ➢ All Other Roads (V/PC): • Peak Direction: 0.75 • Non Peak Direction: 0.50
Municipal Facilities (Administration Buildings and Maintenance Buildings)	City of Issaquah Parks Dept., Facilities Maintenance	<u>Required facilities for specified land use:</u> ➢ Single Family: 9.92 square feet of municipal building per dwelling unit ➢ Multifamily: 5.36 square feet of municipal building per dwelling unit ➢ Non-Residential: 0.00357 square feet of municipal building per Non-Residential square foot.

5 This information is based on the 1999 Rate Study and is not the City of Issaquah's adopted Level of Service.

6 This number of officers per 1,000 people is derived using the following calculation: 11,599 Calls for Service (CFS) / 13,790 people = 0.841 CFS/capita x 1,000 = 841 CFS per 1,000 people. 841CFS / 640CFS (adopted LOS for CFS) = 1.313 police officers per 1,000 people.

4. Capital Facilities Inventory

The GMA does not require the adoption of level of service standards for capital facilities; however, the City has opted to define desired levels of service for the following facilities provided by the City and the Issaquah School District (with their concurrence) in order to monitor the ability of capital facilities to meet public need.

4.1 **Water**. Water facilities, such as water mains and pump stations, provide for the safe and efficient delivery of water to the community. The locations of the City's water facilities are illustrated in Figure 7, the Water System Map (Utilities and Public Services Element, Volume 1).

4.1.1 **Water Level Of Service.** The existing water supply level of service standard is to provide reliable water service for domestic use, fire flow protection and emergencies. All future development must demonstrate that there is adequate water for the proposed use and that fire flow requirements can be met. Water level of service standards, which differ depending on the type of use and its location, are defined in the City's Water System Plan Update.

4.1.2 **Future Water Needs.** The City relies on groundwater from the Lower Issaquah Creek Basin Aquifer System for much of its water needs. The aquifer also serves several neighboring communities.

The pumping capacity is determined partly by groundwater rights (see the Utilities and Public Services Element for a complete discussion regarding water service in the City).

The City's future water needs will be met through continued use of groundwater resources as well as through new water sources such as a planned regional water system from the City of Seattle. The City will need to continue to ensure there is an adequate supply of water for current and anticipated demand, without adversely impacting water quality.

On the capacity side, the City is developing strategies to ensure there is adequate water storage capacity to serve anticipated levels of development. The City is exploring opportunities to increase storage capacity based on the following:

4.1.2.1 providing the maximum fire flow requirement of the hydraulic operating area.

4.1.2.2 providing adequate standby storage for each "Equivalent Residential Unit" (ERU)[7], within the hydraulic operating area as stated within the Water System Plan Update.

4.1.2.3 providing a volume of equalizing storage adequate to provide water on "average day during the peak week period."

4.1.2.4 calculating reservoir capacities as stacked rather than nested and providing redundancy.

4.1.3 **Finance:** Capital facilities costs for the Issaquah City water system are identified in Table CF-2. It is estimated that approximately $10.4 million will be needed to address existing deficiencies and to account for anticipated growth and proper functioning of the existing mains during the period 2003-2008. Another $2.1 million will be needed for non-capacity costs for the same period.

[7] One Equivalent Residential Unit (ERU) is equal to 228 gallons per day.

Table CF-2
City of Issaquah's Capital Facilities Financing Plan
Water

(All Amounts Are Times $1,000)

(1) Sources/Uses	(2) 2003	(3) 2004	(4) 2005	(5) 2006	(6) 2007	(7) 2008	(8) TOTAL
SOURCES OF FUNDS							
Water Capital Fund	525.0	850.0	2,999.0	1,336.0	1,329.0	700.0	7,739.0
Reservoir Construction Fund	470.0	0.0	2,385.0	1,875.6	0.0	0.0	4,730.6
Total Sources*	**995.0**	**850.0**	**5,384.0**	**3,211.6**	**1,329.0**	**700.0**	**12,469.6***
USES OF FUNDS							
Capacity Projects:							
Watermain replacement (size upgrade)	250.0	250.0	500.0	500.0	500.0	500.0	**2,500.0**
480 Zone Reservoir (98-27)**	60.0	0.0	2,385.0	1,875.6		0.0	**4,320.6**
Wildwood pump station upgrade	0.0	0.0	0.0	36.0	379.0	0.0	**415.0**
Bellevue/Issaquah Regional 24" Main	0.0	0.0	2,457.0	0.0	0.0	0.0	**2,457.0**
Forest Rim Reservoir	410.0	0.0	0.0	0.0	0.0	0.0	**410.0**
Valley to Regional Water	0.0	250.0	0.0	0.0	0.0	0.0	**250.0**
Capacity Projects Subtotal	**720.0**	**500.0**	**5,342.0**	**2,411.6**	**879.0**	**500.0**	**10,352.6**
Non-capacity Projects							
Water System Plan Update	0.0	0.0	0.0	0.0	200.0	200.0	**400.0**
Seismic retrofits	0.0	0.0	32.0	150.0	200.0	0.0	**382.0**
Utility rate update		20.0	0.0	50.0	50.0	0.0	**120.0**
West Side Reservoir Maintenance	0.0	0.0	10.0	600.0	0.0	0.0	**610.0**
Sustainable Yield Study	180.0 0.0	280.0	0.0	0.0	0.0	0.0	**460.0**
Op. Sustainable Yield Study	70.0 0.0	0.0	0.0	0.0	0.0	0.0	**70.0**
Vulnerability Assessment	5.0 0.0	50.0	0.0	0.0	0.0	0.0	**55.0**
229th Ave. Access Study	20.0 0.0	0.0	0.0	0.0	0.0	0.0	**20.0**
Non-capacity Projects Subtotal	**275.0**	**350.0**	**42.0**	**800.0**	**450.0**	**200.0**	**2,117.0**
Total Costs	**995.0**	**850.0**	**5,384.0**	**3,211.6**	**1,329.0**	**700.0**	**12,469.6**
Balance							
Surplus or (Deficit)	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***

*Does not reflect up-to-date revenue bond issues.

**Revised budget per Public Works Department.

4.2 **Sanitary Sewer.** The sanitary sewer system handles the sewage needs for much of the City. There are several areas of the City not served by sewer; though the City's goal is to provide sewer service, where feasible, to all areas within City boundaries.

The inventory and locations of the City's sewer facilities are identified in Figure 8, the Sewer System Map (Utilities and Public Services Element, Volume 1). Capital expenditures for sewer projects over the next six years are illustrated in Table CF-3.

4.2.1 **Sanitary Sewer Level Of Service.** The City's existing minimum LOS standard for providing sanitary sewer service is the provision of all necessary mains and other facilities to adequately handle the demand from each service connection.

4.2.2 **Sanitary Sewer Future Needs.** The City's future LOS goals for sewer service are as follows:

4.2.2.1 Use 100 percent of the Department of Ecology Criteria for Sewer Works Design.
4.2.2.2 Provide gravity system sanitary sewer service wherever economically feasible.
4.2.2.3 New systems shall be designed to safely pass the wastewater flow under the future 20-year development scenario, as determined by full site buildout or by the Sewer System Plan Update.

4.2.3 **Finance**. Several sewer projects have been identified to correct existing deficiencies and to accommodate population growth from 2003-2008. Capacity projects over the next six years are estimated at 5.3 million to add or improve sewage capacity. Another $589,000 has been identified for non-capacity projects over the same time period.

Table CF-3
City of Issaquah Capital Facilities Financing
6-Year Sewer Projects (2003-2008)

(All Amounts Are Times $1,000)

(1) Sources/Uses	(2) 2003	(3) 2004	(4) 2005	(5) 2006	(6) 2007	(7) 2008	(8) TOTAL
SOURCES OF FUNDS							
Sewer Capital Projects Fund	582.0	2,087.0	1,402.0	868.0	645.0	300.0	3,797.0
ULID 22 Construction Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sources*	**582.0**	**2,087.0**	**1,402.0**	**868.0**	**645.0**	**300.0**	**5,884.0**
USES OF FUNDS							
Capacity Projects:							
Sewer Main Rehabilitation (S-1)	250.0	250.0	250.0	250.0	250.0	250.0	**1,500.0**
West Downtown Trunk I (S-6)	19.0	595.0	0.0	0.0	0.0	0.0	**614.0**
Forest Drive Extension (S-12)	0.0	0.0	0.0	23.0	270.0	0.0	**293.0**
West Downtown Trunk II (S-4)	0.0	56.0	641.0	0.0	0.0	0.0	**697.0**
NW Cherry Extension (S-7)	0.0	0.0	20.0	220.0	0.0	0.0	**240.0**
Lewis Lane Sewer Design	30.0	170.0	491.0	0.0	0.0	0.0	**691.0**
Upper Sycamore Extension (S-4)	260.0	1,000.0	0.0	0.0	0.0	0.0	**1,260.0**
Capacity Projects Subtotal	**559.0**	**2,071**	**1402.0**	**493.0**	**520.0**	**250.0**	**5,295.0**
Non-capacity Projects *							
Does not include misc. services.							
Sewer System Plan Update (S-10)		0.0	0.0	75.0	75.0	0.0	**150.0**
Utility Rate Update (S-11)		0.0	0.0	0.0	50.0	50.0	**100.0**
Manhole Rehabilitation (S-9)	0.0	16.0	0.0	300.0	0.0		**316.0**
Pickering Wet Well Reline	15.0	0.0	0.0	0.0	0.0	0.0	**15.0**
Pickering Lift Station Fuel System	8.0	0.0	0.0	0.0	0.0	0.0	**8.0**
Non-capacity Projects Subtotal	**23.0**	**16.0**	**0.0**	**375.0**	**125.0**	**50.0**	**589.0**
Total Costs	**582.0**	**2,087**	**1,402.0**	**868.0**	**645.0**	**300.0**	**5,884.0**
Balance:							
Surplus or (Deficit)	***0.0**	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***

* Does not reflect up-to-date revenue bond issues.

4.3 Surface Water

Surface water management deals with the detention/ retention and movement of water on the surface of the ground, typically associated with storm water. The control of storm water is essential to preventing property damage due to flooding and to prevent the degradation of water quality. To this end, the City commits substantial resources to providing adequate storm water management facilities. An inventory of the City's storm water facilities and their locations is provided in Figure 9, the Storm Water Drainage Map (Utilities and Public Services Element, Volume 1).

4.3.1 **Surface Water Drainage Level Of Service:** The City's existing minimum LOS standard for surface water drainage management is the requirement that all private or public on-site or off-site storage, conveyance and treatment facilities result in little or no impact to downstream water quality and quantity.

Several storm drainage projects have been identified to correct existing deficiencies and to accommodate projected growth for the period 2003-2008. Nonstructural storm drainage management measures, such as the implementation of the *Issaquah Basin Action Plan*, will be used to help the City plan for future storm water needs.

4.3.2 **Proposed Flow Reduction:** As development both in and around the City continues, strategies will need to be devised to address stormwater detention and water quality so that area residents and business will not be adversely impacted. Some methods to achieve this goal include:

4.3.2.1 Designing onsite retention/detention facilities, located on the valley bottom areas within the Issaquah Creek basin, to the Level 1 Flow Control Standard, whereby post-development stormwater discharges for the 2-year and 10-year design storm events match the corresponding discharges that existed under pre-developed conditions.

4.3.2.2 Designing onsite retention/detention facilities, not located on the valley bottom areas, to the Level 2 Flow Control Standard, whereby post-development stormwater discharges for all storm events between 50% of the 2-year and the 50-year storm event. Additionally, the 100-year post-development hourly peak flow shall be reduced to the pre-development level.

4.3.2.3 Designing water quality treatment facilities for stormwater discharges to surface and groundwater, for all areas in the Issaquah Creek, to meet the Sensitive Lake Protection Standard. Water quality treatment facilities for infiltrated stormwater are required if soil conditions and infiltration rates do not meet certain design criteria, as detailed in the Design Manual.

4.3.2.4 Designing new stormwater conveyance systems to convey the 25-year design storm, provided that overflow from a 100-year runoff event does not create a severe flooding or erosion problem. In addition, monitoring and maintaining existing infrastructure should continue. All new bridges shall be designed to convey the 100-year event.

4.3.3 Finance. Capital facilities costs for storm drainage system improvements include approximately 1.7 million to account for anticipated growth and proper functioning of the existing system from 2003-2008. Approximately an additional $3.8 million will be needed over the same period for non-capacity projects.

Table CF-4
City of Issaquah Capital Facilities Financing
6-Year Stormwater Projects (2003-2008)

(All Amounts Are Times $1,000)

(1) Sources/Uses	(2) 2003	(3) 2004	(4) 2005	(5) 2006	(6) 2007	(7) 2008	(8) TOTAL
SOURCES OF FUNDS							
Storm Capital Fund	881.0	609.0	1,307.0	1,350.0	690.0	643.0	
Total Sources	**881.0**	**609.0**	**1,307.0**	**1,355.0**	**690.0**	**643.0**	**5,485.0***
USES OF FUNDS							
Capacity Projects:							
Property acquisition and restoration (99-48)(ST-7)	0.0	40.0	5.0	300.0	300.0	300.0	**945.0**
Tibbetts greenway improvements (96-19) (ST-1)	619.0	50.0	10.0	20.0	10.0	20.0	**729.0**
Gilman/Pickering Channel restoration monitoring/ maintenance (99-29/99-17)(ST-10)	40.0	0.0	0.0	0.0	0.0	0.0	**40.0**
Capacity Projects Subtotal:	**659.0**	**90.0**	**15.0**	**320.0**	**310.0**	**320.0**	**1,714.0**
Non-capacity projects:							
Floodplain/floodway mapping (99-49) (ST-12)	0.0	0.0	0.0	60.0	0.0	0.0	**60.0**
Stormwater Management Program	50.0				100.0	100.0	**250.0**
Bianco Mine Tailings Stabilization (201-007) (ST-3)	10.0	9.0	7.0	0.0	0.0	0.0	**26.0**
Cherry Area Channel Improvements (97-14) (ST-9)	15.0	40.0	1,000.0	5.0	5.0	5.0	**1,070.0**
Storm Drainage Rehabilitation & Improvements (ST-8)	75.0	250.0	200.0	700.0	200.0	200.0	**1,625.0**
Water Quality Retrofits/Aquifer Recharge Feasibility Study (ST-15)	0.0	0.0	25.0	200.0	0.0	0.0	**225.0**
Stormwater System Surveying and Mapping (99-47) (ST-11)	0.0	120.0	40.0	10.0	10.0	10.0	**190.0**
Utility rate update (ST-13)	0.0	0.0	0.0	50.0	50.0	0.0	**100.0**
Foothills Detention Pond Fencing	22.0	0.0	0.0	0.0	0.0	0.0	**22.0**
229th Ave. Access Study (storm share)	20.0	0.0	0.0	0.0	0.0	0.0	**20.0**
TV Stormline Inspection	15.0	0.0	0.0	0.0	0.0	0.0	**15.0**
Squak Valley Stream Restoration	15.0	100.0	20.0	10.0	15.0	8.0	**168.0**
Non-capacity projects Subtotal:	**222.0**	**519.0**	**1,292.0**	**1,035.0**	**380.0**	**323.0**	**3,771.0**
Subtotal All Projects:	**881.0**	**609.0**	**1,307.0**	**1,355.0**	**690.0**	**643.0**	**5,485.0***
Balance:	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***	**0.0***
Surplus or (Deficit)							

4.4 Fire Service Facilities: Eastside Fire and Rescue, which was created 1998 by the consolidation of Issaquah Fire Department and Fire District 10, provides fire protection services to the City. The fire department provides a complete range of services including fire protection, emergency medical services, fire code planning, engineering and enforcement to both businesses and residents alike. This requires the Department to maintain appropriate resources to respond to a variety of fire fighting and medical aid needs.

Capital facilities associated with fire protection include facilities such as fire stations (See Figure 12 for locations of fire and police stations within the City), and equipment, including service/aid vehicles and fire fighting equipment.

4.4.1 **Fire Service Level Of Service:** The level of service standard for fire fighting apparatus (vehicles, equipment, etc.) is derived from the *1999 Rate Studies and Ordinances.* The current standard is:

- 0.428 fire units per 1,000 people

An additional level of service measurement is used to determine the number of fire facilities needed based on the following standard:

- one fire station per every five square miles, allowing for variations for topography and geography.

This standard is based on the ability of fire units to respond to a call within the City's adopted 5-minute response time.

The City of Issaquah currently meets both its fire facility and apparatus level of service standards. Response times vary depending on the location of the call and traffic conditions, though the average response time of 3.52 minutes meets the LOS standard. As the City grows, the City will evaluate the need for additional fire stations to provide adequate coverage.

4.4.2 **Future Needs:** Table CF-5 calculates the projected fire needs based on the adopted LOS standards. As Table CF-5 indicates, fire facilities will be adequate, but additional fire apparatus will be required over the next six years to maintain the adopted level of service standards.

4.4.3 **Finance:** Future capital facility expenditures for fire are addressed in Table CF-6. Over the next six years, the City plans approximately $7.8 million in investments to continue to meet the adopted fire LOS standard.

Fire

Determination of the City's fire service needs over the next six years is based on the adopted level of service standard. The level of service standard is used to calculate both facility and equipment needs over the six-year time frame by comparing existing levels of fire service to projected need as illustrated in Table CF-5 below. Future estimates are calculated for both facility and equipment needs for the next six years. As Table CF-5 illustrates, the City will need to address fire apparatus deficiencies over the next six years in order to maintain its adopted level of service standards.

Table CF-5
Fire Level of Service Standards

Apparatus

(1)	(2)	(3)	(4)	(5)
	Population	Apparatus needed @ 0.428 units per 1,000 people	Number of units (apparatus)	Net Surplus or (Deficiency)
2001 Actual	12,950	5.54	6*	+.46
2002- Actual	13,790	5.9	0	+.1
2003 Actual	15,110	6.46	1	+.54
2008 Projected Total	24,516	10.49	7	(-3.49)

Facilities

(1)	(2)	(3)	(4)	(5)
	City Size (in sq. miles)	Stations needed for LOS standard of 1 station per every 5 sq. miles	Existing/projected stations	Net Surplus or (Deficiency)
2002 Actual	9.89	1.97	2**	+0.03
2003 Projected	.64	.12	1†	1
2008 Projected Total	10.53	2.10	3	+.90

* Does not include administrative or staff vehicles

** Does not include temporary station currently in place

† Planned stations for Issaquah Highlands & NW Issaquah.

Table CF-6
City of Issaquah Capital Facilities Financing
6-Year Fire Projects (2003-2008)

(All Amounts Are Times $1,000)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sources/Uses	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**TOTAL**
SOURCES OF FUNDS							
Mitigation Fund (Fire Reserves)	303.9	0.0	0.0	0.0	0.0	0.0	**303.9**
Highlands Fire Station Fund	2,820.0	0.0	0.0	0.0	0.0	0.0	**2,820.0**
Impact Fees/Bond/Other	0.0	2,080.0	1,000.0	2,000.0	0.0	0.0	**5,080.0**
Total Sources	**3,123.9**	**2,080.0**	**1,000.0**	**2,000.0**	**0.0**	**0.0**	**8,203.9**
USES OF FUNDS							
Capacity Projects:							
Highland Fire Station #73	2,685.0	0.0	0.0	0.0	0.0	0.0	**2,685.0**
Land acquisition and construction of NW fire station (Station #72)	0.0	2,000.0	1,000.0	2,000.0	0.0	0.0	**5,000.0**
Medical Aid Car	135.0	0.0	0.0	0.0	0.0	0.0	**135.0**
Capacity Projects Subtotal:	**2,820.0**	**2,000.0**	**1,000.0**	**2,000.0**	**0.0**	**0.0**	**7,820.0**
Non-capacity Projects							
Ladder truck axle replacement	0.0	25.0	0.0	0.0	0.0	0.0	**25.0**
Station #71 (E. Sunset Way) seismic inspection and improvement plan	25.0	0.0	0.0	0.0	0.0	0.0	**25.0**
Infrared Camera	0.0	25.0	0.0	0.0	0.0	0.0	**25.0**
Community Hall Kitchen remodel (for Emergency Ops Center)	0.0	30.0	0.0	0.0	0.0	0.0	**30.0**
Non-capacity Projects Subtotal	**25.0**	**80.0**	**0.0**	**0.0**	**0.0**	**0.0**	**105.0**
Total Costs	**2,845.0**	**2,080.0**	**1,000.0**	**2,000.0**	**0.0**	**0.0**	**7,925.0**
Balance:							
Surplus or (Deficit)	**+278.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

4.5 Police Service Facilities: Police protection services are provided by the City of Issaquah Police Department. In early 2000, a new police facility was constructed across from City Hall South, which combines police, jail and emergency operations under one roof. (See Figure 12, Municipal Facility Map, for locations of police facilities throughout the City).

4.5.1 **Police Level Of Service:** Police level of service standards are determined based on annual calls for service. The current LOS is to provide:

- One officer/staff to handle each 640 annual calls for service (CFS)[8].

Since police officers are not "capital," this standard is extrapolated to calculate the number of patrol vehicles needed. Using the standard of two officers per patrol vehicle found in the *1999 Rate Studies and Ordinances*, a de facto patrol vehicle standard is one vehicle per two officers. In addition, the Rate Study equates 300 square feet of public safety building space to each officer.

Capital facilities associated with police services include police stations, training facilities, and police equipment. Projected capital facility requirements are based on the number of officers needed to respond to the calls for service LOS standard. As the need for additional officers increases, so too does the need for additional police equipment and facilities.

4.5.2 **Police Future Needs:** With the recent construction of a new police facility in 2000, the City more than meets its facility requirements for the next six years; however, as Table CF-7 indicates, the City will need to acquire additional patrol vehicles to meet its police vehicle level of service standards.

4.5.3 **Finance:** Police capital expenditures over the next six years are estimated to be $475,000. Most of the funding will be for additional vehicles and equipment.

[8] Calls for service (CFS) standard is based on an average of 0.28 CFS per residential unit and 0.00166 CFS per commercial square foot.

Table CF-7
Police Level of Service

Patrol Vehicles: 0.5 Vehicles per Officer

	(1)	(2)	(3)	(4)	(5)	(6)
	Population	CFS/capita (0.841)[1]	Officers required @ 640 CFS/ Officer	Patrol Cars Required @ 0.5 cars/ officer	Patrol Cars available	Net Surplus or (Deficiency)
2001 Actual	12,950	10,988	17.1	8.5	8	(-0.5)
2002 Actual	13,790	11,599	18.1	9.1	8 total	(-1.1)
	15,223				8 total (10 total inc. 2 planned for acquisition	
2003 Projected		12,803	20.0	10.0	in 2004)	(-2)
2008 Projected Total	24,516	20,618	32.2	16.1	10	(-6.1)

Public Safety Building: 300 sq. ft. per Officer[2]

	(1)	(2)	(3)	(4)	(5)	(6)
	Population	CFS/capita (0.848)[1]	Officers required @ 640 CFS/ Officer	Square feet required @ 300 sq. ft. / officer	Square Feet available[3]	Net Surplus or (Deficiency)
2001 Actual	12,950	10,988	17.1	5,130	13,129	+7,999
2002 Actual	13,790	11,599	18.1	5,430	+0	+7,699
2003 Projected Total	15,223	12,803	20.0	6,000	+0	+7,129
2008 Projected Total	24,516	20,618	32.2	9,660	13,129	+3,469

[1] Total calls for service in 2002 (11,599) / Total 2002 population (13,790)

[2] Although the Comprehensive Plan does not include a level of service standard for police facilities, the standard from the *1999 Rate Studies and Ordinances* for police services is included to calculate anticipated City expenditures for police facilities.

[3] Taken from Approved Building Plans for the City's Police & Jail facility per Issaquah Public Works Department.

Table CF-8
City of Issaquah Capital Facilities Financing
6-Year Police Projects (2003-2008)

(All Amounts Are Times $1,000)

(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
Sources/Uses	**2003**		**2004**	**2005**	**2006**	**2007**	**2008**	**TOTAL**
SOURCES OF FUNDS								
Capital Improvement Fund	0.0		76.0	0.0	150.0	0.0	95.0	**321.0**
Mitigation Fund (Police Reserves)	69.6		77.0	0.0	0.0	0.0	0.0	**146.6**
Police Station Construction Fund	0.0		0.0	0.0	0.0	0.0	0.0	**0.0**
Equipment Rental Fund (Police Share)	74.0		0.0	0.0	0.0	0.0	0.0	**74.0**
Inmate Welfare Fund	0.0		18.9	0.0	0.0	0.0	0.0	**18.9**
Total Sources	**143.6**		**171.9**	**0.0**	**150.0**	**0.0**	**95.0**	**560.5**
USES OF FUNDS								
Capacity Projects:								
Marked Police Patrol Vehicles	0.0		76.0	0.0	0.0	0.0	0.0	**76.0**
Non-capacity Projects								
Laptop Computer Upgrades	0.0	0.0	22.0	0.0	0.0	0.0	0.0	**22.0**
Police Motorcycle	18.0		0.0	0.0	0.0	0.0	0.0	**18.0**
Mobile Command Vehicle			0.0	0.0	120.0	0.0	0.0	**120.0**
Administrative Vehicle	0.0		0.0	0.0	30.0	0.0	0.0	**30.0**
Detective Vehicles	0.0		0.0		0.0	0.0	65.0	**65.0**
First Response Equipment	30.0		0.0	0.0	0.0	0.0	0.0	**30.0**
Special Operations Team Equipment	0.0		55.0	0.0	0.0	0.0	0.0	**55.0**
911 Call Receiver Station	10.0		0.0	0.0	0.0	0.0	0.0	**10.0**
Weapons Simulators	0.0		0.0	0.0	0.0		30.0	**30.0**
Camera Equipment	0.0	0.0	18.9	0.0	0.0	0.0	0.0	**18.9**
Non-capacity Projects Subtotal:	**58.0**		**95.9**	**0.0**	**150.0**	**0.0**	**95.0**	**398.9**
Total Costs:	**58.0**		**171.9**	**0.0**	**150.0**	**0.0**	**95.0**	**474.9**
Balance								
Surplus or (Deficit):	**+85.6**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

4.6 Parks and Open Space. Park and recreation facilities and open spaces are essential to a community's mental and physical well-being. Parks and open spaces help soften dense development, provide important ecological functions and provide recreation opportunities for citizens and visitors. For more detailed information on Parks and Open Space, see the Parks, Open Space, Trails and Recreation element.

4.6.1 **Parks Level of Service:** Calculation of parks level of service standards is a four-step process. Unlike a traditional approach of calculating the number of parks or acres of parkland required per person, Issaquah's level of service standards for parks are determined through the application of a formula that measures overall parks investment per person. This "investment per capita" method is used to measure parks and recreation levels of service for the City's park and recreation facilities within the City limits. These calculations do not include those facilities owned and operated by other jurisdictions (such as schools) or private entities (such as private health clubs) over which the City has no control. Since the City does not provide these facilities, they are not a part of the level of service calculation.

The "investment per capita" method provides the city with a flexible approach to providing park and recreational facilities. By using the total capital investment per person figure, the City is able to provide facilities that are most appropriate for each site without being required to maintain arbitrary ratios for each type of facility at each park site. This method also provides the City the flexibility to be responsive to changing park needs.

Table CF-9 lists the types of land and facilities that make up Issaquah's park system. For each component listed alphabetically in column 1, the ratio of capacity per person determined by the *Parks Impact Fee Study* is listed in column 2, and the average cost per facility is listed in column 3. Finally, column 4 presents the calculated capital investment per person by multiplying the ratio by the average cost.

As indicated in Table CF-9, the Parks level of service standard is approximately $2036 per person (new growth). This figure is used to calculate projected Parks capital expenditures. However, the provision of specific parks and recreation facilities are determined by a different set of standards applied by the Parks Department based on the standards in the 1995 Parks Plan.

Table CF-9
Park Level of Service Standards

(1) Type of Park or Facility (alphabetical order)	(2) Capacity per Person[1]	(3) Average Cost per Facility (in dollars)	(4) Capital Investment per Person (col. 2 * col. 3)
Amphitheater	0.00010	435,204	42.96
Baseball Field	0.00020	150,000	29.62
Basketball Court	0.00010	27,500	2.71
Community Center, Youth Center, Multipurpose Room	0.00010	4,337,222	428.16
Football Field	0.00010	160,000	15.79
Land – Active	0.00481	45,652	219.70
Land – Passive/Natural	0.05083	4,214	214.19
Land – Unstructured Recreation	0.01125	44,528	501.10
Picnic Areas/Pocket Parks	0.00118	30,000	35.54
Play Lot/Tot Lot	0.00020	65,000	12.83
Senior Center	0.00010	165,251	16.31
Skateboard Park	0.00010	40,000	3.95
Soccer Field	0.00010	175,000	17.28
Softball Field	0.00059	150,000	88.85
Swimming Pool – Indoor	0.00010	890,000	87.86
Trail – Urban	0.00039	686,400	271.04
Trail Heads	0.00020	245,000	48.37
Level of Service Standard (Total)			**$2,036.26**

[1]Based on number of facilities existing in 1999/ total population (1999)

The calculations in the following tables are used to determine Issaquah's future park facilities needs to accommodate *projected* population growth. The Parks facilities needs for the entire population (existing and future) are identified in the Parks financing section (Table CF-14)

4.6.2 **Step 1: Park/Recreation Capital Investment per Person:** The first step in determining the City's future park and recreational needs is to calculate the amount needed to meet the level of service standard, or the capital investment per person*. The capital investment per person is calculated by multiplying the capacity of parks and recreational facilities times the average costs of those items.

Table CF-10
Capital Investment/Person Calculation

Capacity per Person	x	Average cost per facility	=	Capital investment per person

Capacity per Person
Capacity is a measurement of the size or number of facilities of a certain type (e.g. number of acres of parks) relative to the City's total population. The units of capacity were determined by dividing Issaquah's 1999 inventory of parks and recreational facilities by the City's 1999 population.

Average Cost per Facility
The average cost per facility is determined in the six-year CIP for Parks Land Development and Trails. The CIP identifies capital projects required to maintain the City's current inventory of park and recreation facilities and to meet the growth demand based on adopted standards for level of service.

Capital Investment per Person*
The product of capacity per person times the average cost per facility yields the capital investment cost per person.

4.6.3 **Step 2: Value Needed for Growth:** The second step in determining future parks and recreation facility needs is to calculate the value needed for growth, which is determined by estimating the City's future population and multiplying by the capital investment per person.

The capital investment per person was calculated in Step 1. The forecast population growth is estimated annually as part of Issaquah's long range planning process and represents the difference between the current (1999) population of 10,130 and the 2010 population, which is estimated to be 20,172. Thus, the forecast population growth is the difference: 10,042.

Table CF-11
Value Needed for Growth Calculation

(1) Capital investment per person	(2) Forecast population growth†	(3) Value needed for growth
$2,036.26	10,042	$20,448,102

The formula above shows the calculation of the value of parks and recreational facilities needed for growth. Column 1 lists the level of service standard for capital investment per person; column 2 shows the growth in population that is forecast; and column 3 is the total value of parks and recreational facilities that is needed to serve the growth that is forecast for Issaquah.

Column 3 shows that Issaquah needs parks and recreational facilities valued at $20,448,102 in order to serve the growth of 10,042 additional people who are expected to be added to the City's existing population. The future investment in parks and recreational facilities will need to be $20,448,102 unless the City has existing deficiency or existing reserve capacity in its parks and recreational facilities.

4.6.4 **Step 3: Investment Needed for Growth:** The third step in the process is to determine the amount the City needs to invest to address any park and/or recreation deficiencies. The investment needed for growth is calculated by subtracting the value of any existing reserve capacity from the total value of parks and recreational facilities needed to serve the growth calculated in Step 2.

* Column 4 in Table CF-9

† 1999 Forecast growth – taken from the 1999 Rate Studies and Ordinances

Value of existing reserve capacity

The value of reserve capacity is the difference between the value of the City's existing inventory of parks and recreational facilities, and the value of those assets that are needed to provide the level of service standard for the existing population.

Table CF-12 shows the calculation of the investment in parks and recreational facilities that is needed for growth. Column 1 lists the value of parks and recreational facilities needed to serve growth (from Table 2), column 2 shows the value of existing reserve capacity (from Appendix C of the Rate Study for the 1999 Inventory Level of Service), and column 3 is the remaining investment in parks and recreational facilities that is needed to serve the projected growth.

Table CF-12
Investment Needed for Growth Calculation

(1) Value needed for growth	(2) Value of existing reserve capacity	(3) Investment needed for growth
$20,448,102	0	$20,448,102

As column 3 in Table CF-12 illustrates, the City has no reserve capacity and therefore needs to invest $20,448,102 in additional parks and recreational facilities in order to serve future growth. The future investment in parks and recreational facilities to be paid by growth may be less that $20,448,102 if the City has other revenues it invests in its parks and recreational facilities.

4.6.5 **Step 4: Investment to be Paid by Growth:** The last step in the process is to determine the investment to be paid by growth. The investment to be paid by growth is calculated by subtracting the amount of any revenues the City invests in infrastructure from the total investment in parks and recreational facilities needed to for growth. City investment in parks is offset to some degree by developer contributions, impact fees, grants and other contributions.

Impact fee rate calculations must recognize and take into account revenues, which are earmarked or proratable to projects that are funded with impact fees. The City of Issaquah has historically used local revenues, such as real estate excise tax, councilmanic bonds and other revenues within the City's Capital Improvement Fund and General Fund to pay for part of the cost of park and recreational facility capital costs. The City's investment during the past five years has averaged 44% of the cost of capital improvement projects for parks and recreational facilities.

These revenues are accounted for by reducing the investment needed for growth in the fourth formula for computing impact fees. These reductions are the "adjustments" required by law for future taxes or other payments.

Revenues that are used for repair, maintenance or operating costs are not used to reduce impact fees because they are not used, earmarked or prorated for the system improvements that are the basis of the impact fees. Revenues for payments of past taxes paid on vacant land prior to development are not included because new capital projects do not have prior costs; therefore prior taxes did not contribute to such projects.

Table CF-13 shows the calculation of the investment in parks and recreational facilities that needs to be paid by growth. Column 1 lists the investment in parks and recreational facilities needed to serve growth. Column 2 shows the value of City investment for growth (calculated at 44% of the investment needed for growth), and column 3 is the remaining investment in parks and recreational facilities that will be paid by growth.

Table CF-13
Minimum Investment Paid by Growth Calculation

(1) Investment needed for growth	(2) City investment for growth	(3) Minimum investment to be paid by growth
$20,448,102	$8,997,165	$11,450,937

4.6.6 **Future needs:** A parks and recreation impact fee will be collected from new growth to provide for parks and facilities needed to support this additional growth. The City's annual Capital Improvement Plan (CIP) will incorporate park and facility needs as needed by the community.

Table CF-13 shows that growth in Issaquah would need to invest $11,450,937 for additional parks and recreational facilities to maintain the City's standards for future growth projected in 2010 by the 1999 Rate Study.

Table CF-14
Capital Facilities Projects and Financing Plan
6-year Parks Projects (2003-2008)[1]

(All Amounts Are Times $1,000)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sources/Uses	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**TOTAL**
SOURCES OF FUNDS							
Capital Improvement Fund	0.0	160.0	1,120.0	1,620.0	930.0	860.0	**4,690.0**
Grants/ Donations/Mitigation Fund	349.7	110.0	0.0	0.0	0.0	0.0	**459.7**
Highlands Park Fund	4,086.0	660.0	460.0	440.0	440.0	0.0	**6,086.0**
Senior Center Construction Fund	1,097.3	0.0	0.0	0.0	0.0	0.0	**1,097.3**
Total Sources	**5,533.0**	**930.0**	**1,580.0**	**2,060.0**	**1,370.0**	**860.0**	**12,333.0**
USES OF FUNDS							
Capacity Projects:							
Issaquah Highlands Parks	3,886.0	660.0	460.0	440.0	440.0	0.0	**5,886.0**
Squak Valley Park South	0.0	0.0	0.0	750.0	150.0	0.0	**900.0**
Squak Valley Park North	0.0	0.0	150.0	0.0	0.0	0.0	**150.0**
Tibbetts Tot Lot	0.0	0.0	0.0	0.0	0.0	90.0	**90.0**
Pickering Courtyard Project	0.0	200.0	0.0	0.0	0.0	0.0	**200.0**
Pickering Group Picnic Area	0.0	0.0	0.0	200.0	100.0	100.0	**400.0**
Senior Center Improvements	1,097.3	0.0	0.0	0.0	0.0	0.0	**1,097.3**
Property Acquisition and Restoration	0.0	0.0	500.0	500.0	500.0	500.0	**2,000.0**
Trail Expansions and Improvements	0.0	50.0	150.0	150.0	150.0	150.0	**650.0**
Tibbetts Valley Park: Field #1 & #2 lights	0.0	0.0	300.0	0.0	0.0	0.0	**300.0**
Capacity Projects Subtotal	**4,983.3**	**910.0**	**1,560.0**	**2,040.0**	**1,340.0**	**840.0**	**11,673.3**

[1] Information for years 2004-2008 is from the 2003 update to the Issaquah Parks, Recreation, Trails and Open Space Plan to be adopted concurrently with all other amendments to the Comprehensive Plan. In future years this information will be included in the CIP.

Table CF-14
Capital Facilities Projects and Financing Plan
6-year Parks Projects (2003-2008) (Continued)

(All Amounts Are Times $1,000)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sources/Uses	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**TOTAL**
Non-capacity Projects							
Swimming Pool Enhancements[1]	2.5	20.0	20.0	20.0	20.0	20.0	**102.5**
Park Facility Maintenance Vehicle	21.0	0.0	0.0	0.0	0.0	0.0	**21.0**
Hillside Park Master Plan	0.0	0.0	0.0	0.0	10.0	0.0	**10.0**
Non-capacity Projects Subtotal	**23.5**	**20.0**	**20.0**	**20.0**	**30.0**	**20.0**	**133.5**
Total Costs	**5,006.8**	**930.0**	**1,580.0**	**2,060.0**	**1,370.0**	**860.0**	**11,806.8**
Balance: Surplus or (Deficit)	**526.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

[1]Combines multiple projects from the 2003 CIP to refurbish the existing swimming pool.

Table CF-15
Capital Facilities Projects and Financing Plan
Parks (Annual Investment Per Capita of Population Growth)

(All Amounts Are Times $1,000)

(Established Rate = $2,036.26 per Person)

(1) Year	(2) Population	(3) Population Growth from previous year(s) (actual/ projected)	(4) Parks Capacity Investments (actual/planned)	(5) Adopted LOS Capacity Total (=Per Capita Growth x $2,036.26)	(6) Annual Surplus/Deficit Total
2001 Actual	12,950	1,738	$ 5,860,000	$ 3,539,022	+$ 2,320,977
2002 Actual	13,790	840	$ 11,837,300	$ 1,710,458	+$10,126,842
2003 Projected	15,110	1,320	$4,983,000	$ 2,687,863	+$ 2,295,137
2008 Projected Total	24,516	9,406	$ $6,690,000	$19,153,061	+$41,082*

* Reflects cumulative absorption of surplus.

As Table CF-13 indicates, the total amount of capital funds needed to meet the anticipated demand, or the investment needed for growth, is approximately $20,448,102. As identified in Table CF-14, funding (direct, mitigation, and donation) for capacity projects over the next six years is estimated to be $11,673,300. Non-capacity projects are estimated to cost $133,500 for the same period. Table CF-15 indicates future surplus or deficit totals for planned capacity projects as recorded in the 2003 Issaquah Parks, Recreation, Trails and Open Space Plan.

4.7 Municipal Facilities. Municipal facilities are those facilities, such as City Hall or the Community Center, which provide service to the community. The locations of municipal facilities in the City are identified in Figure 15 (Municipal Facilities Map, Volume 1). For more information regarding Municipal Facilities, refer to the proposed Downtown Issaquah Public Facilities Master Plan (1992).

4.7.1 **Administration:** City Hall administrative activities are currently accommodated in three separate buildings. City Hall South, located along Sunset Way in Olde Town, is the City's primary gathering place for many public meetings. The second facility, City Hall Northwest, is located near I-90 and serves as an interim facility to accommodate an increase in staffing. The newest facility is the Police/Jail building that also includes the City's administrative offices. The City's long term goal is to locate most of the City government offices in the downtown area.

4.7.2 **Maintenance:** City Public Works maintenance shops, equipment rental garage and Parks maintenance shops are all located on a 2.3- acre site in a residential neighborhood near Issaquah Creek. Building maintenance shops are dispersed in several City facilities. These are semi-industrial, operational facilities necessary to accommodate the City's vehicle maintenance, materials storage, work shops and work crew quarters. The existing facilities are not adequate for the current need and will need to be expanded in the future as the City grows.

In 1993, the City purchased 9.1 acres of land adjacent to I-90 as a future maintenance site. This facility became operational in 2003. By locating all shops on a single site, the City saves money by not having to duplicate facilities.

4.7.3 **Municipal Facilities Level of Service:** To calculate the impact of new residents on general government services, the City focuses on the unfunded portion of the cost of government buildings needed to serve the community. City owned buildings, which are not used for general government service, such as the Depot and Gilman Town Hall Historic Museum are not included in the calculation of level of service (i.e. these are "non-capacity" projects).

4.7.4 **Municipal Facilities Future Needs:** Space needs for City Hall and City Shops will be affected by several variables, including the annexation of large areas outside the existing city limits, resulting in the need for additional City staff. A Public Facilities Master Plan has been developed to address most of the future space needs of the City facilities in the downtown area. The number of Administrative and Maintenance staff and their equipment will primarily dictate the size of the facilities.

By the year 2010 the number of staff needing space in the City facilities would be approximately 220 employees. The space requirements for that number of employees would be approximately 55,600 square feet. An average ratio of 258 square feet per employee (in 2015) was extracted from the *Public Facilities Master Plan.*

4.7.5 **Finance:** It will cost approximately $13.5million to accommodate the anticipated growth and expansion of the City Administration and Shop facilities between 2002 and 2007. No estimate of Administrative and Maintenance capital facilities costs are currently available for 2008 through 2015. The Public Works Maintenance Shops require eight acres if developed alone. The Parks Maintenance shops require approximately four acres if developed alone.

Table CF-16
City of Issaquah Capital Facilities Financing Plan
6-year Municipal Facilities Projects (2003-2008)

(All Amounts Are Times $1,000)							
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Sources/Uses	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**TOTAL**
SOURCES OF FUNDS							
Capital Improvement Fund (Municipal Facilities portion)	84.0	578.0	0.0	0.0	0.0	0.0	662.0
Shop Construction Fund	4,010.8	0.0	0.0	0.0	0.0	0.0	4,010.8
Mitigation Fund	50.0	0.0	0.0	0.0	0.0	0.0	0.0
Equipment Rental Fund (capital outlay)	301.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sources	**4,485.8**	**578.0**	**0.0**	**0.0**	**0.0**	**0.0**	**5,063.8**
USES OF FUNDS							
Capacity Projects:							
Administrative Offices (10,069 sf) ('02 carryover)	80.0	0.0	0.0	0.0	0.0	0.0	**80.0**
PW Shop Construction (40,967sf)	3,860.8	0.0	0.0	0.0	0.0	0.0	**3,860.8**
Satellite Storage Sites (2x 1,500 sf)[1]	150.0	0.0	0.0	0.0	0.0	0.0	**150.0**
Subtotal Capacity Projects	**4,090.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4,090.8**
Non-capacity projects							
Citywide Computer Plan Implementation	100.0	0.0	0.0	0.0	0.0	0.0	**100.0**
Park Maintenance Shop Remodel	50.0	0.0	0.0	0.0	0.0	0.0	**50.0**
Parks Shop Drive landscaping	0.0	101.5	0.0	0.0	0.0	0.0	**101.5**
Bucket Truck	150.0	0.0	0.0	0.0	0.0	**0.0**	**150.0**
VHF Radio Repeater	38.0	0.0	0.0	0.0	0.0	0.0	**38.0**
De-Icing Unit	13.0	0.0	0.0	0.0	0.0	0.0	**13.0**
City Hall South siding	0.0	69.7	0.0	0.0	0.0	0.0	**69.7**
Tibbetts Creek Manor Driveway	0.0	13.0	0.0	0.0	0.0	0.0	**13.0**
Tibbetts Creek Manor Fencing	0.0	10.0	0.0	0.0	0.0	0.0	**10.0**
Tibbetts Creek Barn roof replacement		8.8		0.0	0.0	0.0	**8.8**
City Hall NW parking lot replacement	0.0	175.0	0.0	0.0	0.0	0.0	**175.0**
City Hall NW roof replacement		200.0	0.0	0.0	0.0	0.0	**200.0**
Subtotal non-capacity projects		**578.0**	**0.0**	**0.0**	**0.0**	**0.0**	**929.0**
TOTAL		**578.0**	**0.0**	**0.0**	**0.0**	**0.0**	**5,019.8**
Balance:							
Surplus (or Deficit)		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

[1]**Satellite storage square footage per Public Works Operations (6/12/03)**

Table CF-17

Capital Facilities Projects and Financing Plan

Municipal Facilities (Annual Investment Per Capita of Population Growth)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	**New Single Family Dwelling Units**	**Adopted LOS=9.92 sq.ft. per SF Unit**	**New Multi-Family Dwelling Units**	**Adopted LOS=5.36 sq.ft. per MF Unit**	**New Non-Residential Floor Space**	**Adopted LOS=.00357 sq. ft. per 1 Non-Res sq. ft.**	**Adopted LOS Needed Capacity Total (=Columns 3+5+7)**	**Municipal Facilities Floor Space Added**	**Annual Surplus/ Deficit Total**
2000 Actual	276[2]	2,737.92	247[2]	1,323.92	1,503,5073	5,367.52	9,429.36		(0)
2001 Actual	46	456.32	462	2,476.32	75,954	271.15	3,203.79	[4]	[4]
2002 Actual	132	1309.44	59	316.24	13,506	48.22	1,673.89	51,036	+46,158.32
2003 Projections[1]	tbd	tbd	tbd	tbd	tbd	tbd	tbd	3,000[5]	Surplus tbd

[1] Available projections address population and do not offer the level of detail needed for this LOS measure. Annual monitoring will continue.
[2] Includes new units gained in the North Issaquah annexations of 2000 as noted in the 1999 North Issaquah Annexation Evaluation Report.
[3] 27 businesses were noted in the 1999 North Issaquah Annexation Evaluation Report that range widely in size. This figure accounts for Issaquah permits in 2000 and the pipeline projects in the area constructed under King County. Additional data on pre-annexation existing structures to be added, but will not significantly impact LOS due to balance of municipal facilities at time of annexation.
[4] Appropriations for administrative office space were made in 2001 as well as 2002. The space was not available for occupancy until 2002.
[5] 3000 square feet added with 2 satellite storage sites in 2003.

Permit Data Source = Permit Plan

4.8 Schools. School facilities locations are illustrated in Figure 12 (Facility Location Map). Proposed improvements and capital expenditures are determined by the Issaquah School District No. 411, which has prepared a separate Capital Facilities Plan.

4.8.1 School Level of Service: The City neither sets nor controls the level of service standards for area schools. The Issaquah School District is charged with ensuring there is adequate facility space and equipment to accommodate existing and projected student populations. The City coordinates land use planning with the school district to ensure there is adequate capacity in place or planned.

The level of service is described in the "Issaquah School District No. 411, Capital Facilities Plan" (as annually amended).

4.8.2 School Future Needs. Future needs are discussed in the "Issaquah School District No. 411, Capital Facilities Plan" (as annually amended).

4.9 Transportation. The description of the existing transportation system, deficiencies and future needs are identified in the Transportation Element of this Comprehensive Plan.

4.10 Funding of Capital Facilities. All municipal capital facility needs for existing and future development except transportation facilities are identified in this element. The previous sections describe the capacity of facilities, their level of service standards and the funding estimates for the proposed capital facility projects. Each table lists proposed projects and their funding sources over the next six years. Projects are identified as capacity or non-capacity projects. Capacity projects are those projects that address current or future level of service deficiencies. Non-capacity projects are other necessary projects, such as studies, plans, additional equipment, but do not directly address level of service deficiencies. The total capital improvement costs needed to meet the City's 2002 capital facility needs based on the adopted level of service standards are illustrated in Table CF-17. This table provides a breakdown of costs per type of capital facility and associated revenue sources to fund the projects.

4.10.1 Relationship of CFP to CIP. The Capital Improvement Plan (CIP) is a list of public improvement projects identified by the City. The list is updated annually and identifies all the capital projects the City could undertake given adequate revenues. Since the City's revenue is limited, the City prioritizes the projects in the CIP and chooses a portion of those projects based on need and finances available. Those projects chosen are adopted into the Capital Facilities Plan.

The CIP is linked to the City's annual budget through the Capital Facilities Element in that the adopted budget is reflected as the first year's capital improvement expenditures. Each year, as the budget is updated, so too is the Capital Facilities Element to reflect the adopted budget. An important distinction between the budget and CIP is that the one-year budget may become part of the legally adopted annual operating budget, whereas the longer-term CIP does not commit the City to a particular expenditure for a particular year. Thus, the CIP allows the City some flexibility in scheduling projects based on need or funding opportunities and does not lock the City into projects that may not be needed at time of funding.

4.10.2 Revenues. The City uses a number of funding mechanisms to pay for its capital facilities needs. Funding for capital projects comes from grants, bonds, property and sales taxes, impact fees and contributions. Some of these funds are earmarked for specific projects while other projects are funded by the General Fund. The General Fund revenues are used not only for part of the capital facilities expenditures, but also for the operation and maintenance of the City. Utility fees are the primary source of revenue for water, sewer, and storm drainage capital improvements and operating costs; however, additional non-city sources of funds will be needed to fund many projects. The non-city sources would include grants, financing with bonds, impact fees, County, State or Federal funds, and the continued use of Utility or Road Local Improvement District (ULID & RLID) and developer extension agreements.

4.10.3 Expenditures. The Capital Facilities Element covers only the cost of capital facilities. With the development of these facilities there will be other operating, maintenance and staff costs that will continue to accrue annually over the life of the facility.

Table CF-18
City of Issaquah Capital Facilities Financing Plan
Capital Improvement Costs 2003

(All Amounts in Thousands of Dollars)

	TOTAL
SOURCES OF FUNDS[1]	
Capital Improvement/Capital Outlay Fund	84.0
Equipment Rental Fund	375.0
ghlands Fire Station Fund	2,820.0
ghlands Park Facilities Fund	4,086.0
itigation Fund	773.2
Reservoir Construction Improvement Fund	470.0
Senior Center Construction Fund	1,097.3
Shop Construction Fund	4,010.8
Sewer Capital Projects Fund	582.0
Stormwater Capital Fund	881.0
Water Capital Projects Fund	525.0
Other (ex. Mitigation, Donation, misc.)	
Total	**15,704.1**
USES OF FUNDS[2]	
Water	995.0
Storm water	881.0
Sanitary Sewer	582.0
Police Services	58.0
Fire Services	2,845.0
Administration	4,441.8
Parks	5,006.8
Total	**14,809.6**

[1]Does not reflect up-to-date revenue bond issues.
[2] Does not reflect misc. services

5. Capital Facilities Goal, Objectives and Policies

GOAL: Provide adequate public services and facilities which address existing deficiencies and future needs through prudent use of fiscal resources, levels of service, realistic time lines, resource management, and sustainable development.

OBJECTIVE CF-1: Provide facilities and services. Provide capital improvements to correct existing facility and service deficiencies; to replace obsolete facilities; and to accommodate projected growth within the local service area through the following strategies:

Policy CF-1.1: Level of Service Standards. The following standards shall be used to evaluate adequate public facilities and services and projected needs as established in Table L-2 of the Land Use Element.

1.1.1 Water. The existing LOS for water supply shall provide reliable water service for domestic use, fire flow protection, and emergencies. The City will work with the Sammamish Plateau Water and Sewer District and other water jurisdictions to ensure adequate service is provided for properties served by those suppliers.

1.1.2 Storm water. The flow reduction level of service standards are based on the following requirements of the 1998 King County Surface Water Design Manual:

1.1.2.1 Onsite retention/detention facilities, located on the valley bottom areas within the Issaquah Creek basin, shall be designed to the Level 1 Flow Control Standard, whereby post-development stormwater discharges for the 2-year and 10-year design storm events match the corresponding discharges that existed under pre-developed conditions.

1.1.2.2 Onsite retention/detention facilities, not located on the valley bottom areas, shall be designed to the Level 2 Flow Control Standard, whereby post-development stormwater discharges for all storm events between 50% of the 2-year and the 50-year storm event. Additionally, the 100-year post-development hourly peak flow shall be reduced to the pre-development level.

1.1.2.3 Water quality treatment facilities for stormwater discharges to surface and groundwater, for all areas in the Issaquah Creek, shall be designed to meet the Sensitive Lake Protection Standard. Water quality treatment facilities for infiltrated stormwater are required if soil conditions and infiltration rates do not meet certain design criteria, as detailed in the Design Manual.

1.1.2.4 New stormwater conveyance systems shall be designed to convey the 25-year design storm, provided that overflow from a 100-year runoff event does not create a severe flooding or erosion problem. All new bridges shall be designed to convey the 100-year event.

1.1.3 Sewer. The existing and future LOS goals for sewer service are as follows:

1.1.3.1 Use 100% of the Department of Ecology Criteria for Sewer Works Design. New systems shall be designed to convey the 5-year flow rate without overflow.

1.1.3.2 Provide gravity system sanitary sewer service wherever economically feasible.

1.1.3.3 Design new systems to safely pass the wastewater flow under the future 20-year development scenario, as determined by full site buildout or by the Sewer System Plan Update.

1.1.3.4 Work with other providers to ensure those properties not served by the City receive adequate water service.

1.1.4 Solid Waste and Recycling. Collection service for garbage and recycling shall be available to all properties within the City.

1.1.5 Fire Protection. One fire station per every five square miles shall be provided, allowing for variations for topography and geography. In addition, a total of 0.428 fire units per 1,000 people shall be provided[9].

1.1.6 Police Protection. The level of service is one officer/staff for every 640 annual calls for service (CFS). [10]

1.1.7 Parks and Recreation. The Parks, Open Space and Recreation Level of Service Standard11 requires that as population growth occurs, facilities shall be provided based on a one time only per capita expenditure of $2,036.26.

1.1.8 Transportation. The LOS for transportation is found in the Transportation Element of the Comprehensive Plan.

1.1.9 Public Schools. The levels of service are established in the "Issaquah School District No. 411, Capital Facilities Plan"

Policy CF-1.2: Correct existing deficiencies.

1.2.1 Inventory the facilities and services within the City's local service area annually to determine deficiencies.

1.2.2 Identify potential solutions for the deficiencies,

[9] 1999 Rate Study and Ordinance

[10] (CFS 1994 is calculated based on .28 CFS per resident; .00166 CFS per square foot commercial).

[11] Derived from the Park Impact Fee study contained in the *1999 Rate Study and Ordinance.*

based on need, cost, efficiency of provision, and location of deficiency.

1.2.3 Establish a prioritized strategy for correcting deficiencies based on consistency with Land Use element goals, plans to replace or upgrade existing facilities and financial feasibility.

Policy CF-1.3: Future needs. Manage land use change and develop capital facilities and services to direct and control land use patterns, intensities and efficient service provision. Facilities need to ensure that services provided are consistent with the City's adopted level of service, are included in the Capital Improvements list, and should be funded according to funding mechanisms listed in Policy CF-1.7.

1.3.1 Allow development only when and where all public facilities and essential public services are adequate, and such development can adequately be served without reducing levels of service elsewhere.

1.3.2 Development must provide facilities and/or services at its own expense in order to develop concurrency with service provision if adopted level of service for facilities and/or services are currently unavailable and public funds are not committed to provide such facilities,

1.3.3 Provide public facilities and services at the adopted level of service standards needed to serve said development prior to the issuance of the Certificate of Occupancy. If facilities and services are not provided, a Certificate of Occupancy shall not be granted.

1.3.4 Future development shall bear a fair share, as defined, of facility improvement cost necessitated by the development to achieve and maintain adopted level of service standards and efficient service provision.

1.3.5 "Concurrent with development" shall mean that transportation facilities or system improvements are currently existing, or financially committed for completion within six years of the issuance of the Certificate of Occupancy. For developments or projects that do not have a Certificate of Occupancy, a similar measure will be established through a Concurrency Management System. A Concurrency Management System based upon the following Adequacy Time Frame will be established:

Functional Class	Adequacy Time Frame
Principal Arterials	6 years
Minor Arterials	4 years
Commercial Collector	2 years
Residential Collector	2 years
Local Non-residential	Immediate
Local Residential	Immediate

The Adequacy Time Frame shall be based upon demonstration that financing is available to ensure construction of necessary improvements within the time specified for each functional class. The time line should provide immediate corrections to impacts to local streets while providing adequate project planning and development for large system improvements. The time line shall begin upon development approval of said project.

Policy CF-1.4: Siting new school facilities. Cooperate with the Issaquah School District to address the siting of new school facilities that are needed to serve new development and growth.

Policy CF-1.5: Capital improvement projects. Proposed capital improvement projects shall be compatible with the surrounding area's scale and character. Individual projects shall be evaluated and prioritized using the following criteria:

1.5.1 Corrects existing deficiencies and replaces inadequate facilities;

1.5.2 Eliminates public hazards;

1.5.3 Provides facilities for projected growth based on City estimates, as established in the Land Use Element;

1.5.4 Eliminates capacity deficits;

1.5.5 Provides financial feasibility;

1.5.6 Meets the localized needs of projected growth patterns, as established in the Land Use Element;

1.5.7 Consistent with requirements for new development and redevelopment;

1.5.8 Consistent with requirements for plans of state agencies;

1.5.9 Minimizes local budget impact;

1.5.10 Consistent with location and related design and scale;

1.5.11 Minimizes impact on surrounding uses and natural and cultural resources.

1.5.12 Consistent with the policies outlined in the Water Utility, Sewer, and Storm Drainage Plans, as amended.

1.5.13 Consistent with the policies for the creation and maintenance of utility facilities and public services in the Utilities and Public Services Element.

Policy CF 1.6: Prioritizing of Capital Improvements: All projects in the Capital Improvement Plan shall be consistent with the Land Use Vision, "*Municipal operations will be dedicated to enhancing the community's water and air quality, protection of critical areas and water resources, and provision of efficient public services to maximize public safety.*" Any revenue source that cannot be used for the highest priority will be used beginning with the highest priority for which the revenue can legally be expended. The City will determine the priority of public facility capital improvements in a manner consistent with City Council Resolution 2002-16 entitled Financial Policies (See Volume 2).

Policy CF-1.7: Six Year Capital Improvement Plan (CIP). All City departments shall coordinate long range financial planning activities to conserve fiscal resources available to implement the Capital Improvement Plan, including the Transportation Improvement Plan.

1.7.1 Include capital improvement projects identified in other elements of this plan and which cost over $5,000 in the Six Year Capital Improvement Plan.
1.7.2 Review those capital projects under $5,000 for inclusion in the City's annual budget.
1.7.3 Use the Six Year CIP to prioritize the financing of capital facilities within projected funding capacities and update it annually prior to the City's budget process. High priority of funding shall be given to those projects consistent with the City's Comprehensive Plan goals.
1.7.4 Fund capital projects only when incorporated into the City budget, as adopted by City Council.
1.7.5 Evaluate capital projects that are not included in the Six Year CIP and are potentially consistent with the Comprehensive Plan prior to the project's inclusion into the City's budget.

Policy CF-1.8: Financing. Finance the needed capital facilities in an economic, equitable and efficient manner.

1.8.1 Distribute the burden for financing capital facilities among the primary beneficiaries of the facility, including the present and future users where feasible.
1.8.2 Use general revenues only to fund projects that provide general benefit to the entire community.
1.8.3 Consider long term borrowing for capital facilities as an appropriate method of financing large facilities that benefit the City as a whole for more than one generation of users.
1.8.4 If funding opportunities for capital facilities are insufficient to meet existing needs for the provision of urban services, reassess the Land Use Element's forecasted growth and adopted levels of service.
1.8.5 Use special assessment, revenue and other self-supporting bonds where possible, instead of general obligation bonds.
1.8.6 Secure grants or private funds whenever possible to finance capital improvements.
1.8.7 Continue collecting impact fees in accordance with the GMA and the Land Use Code as part of the financing for public facilities. Such financing should provide for a balance between impact fees and other sources of public funds. Impact fees should be reviewed on an annual basis
1.8.8 Collect impact fees only for system improvements which are reasonably related to and will benefit the new development in accordance with GMA; the fees shall not exceed a proportionate share of the costs of system improvements reasonably related to the new development.
1.8.9 Monitor public services and utilities not managed by the adopted Concurrency Management System and, as capacity / service constraints become evident, expand the formal Concurrency Management Systems to include constrained public services and utilities.
1.8.10 Continue to assess and collect those mitigation fees described in the Land Use Code for public services and facilities not covered by impact fees.

Policy CF-1.9: School impact fees. Continue working with the Issaquah School District to collect and assess school impact fees, and those procedures and protocols governing the fee program.

Policy CF-1.10: Resource Efficiency and Environmental Protection: Encourage infill, redevelopment and PAA development to design, develop, construct and maintain projects in a resource efficient and sustainable manner, which minimizes impacts to and improves the quality of the environment, community and economy.

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Figure 15: Municipal Facilities Map